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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/997,336	11/29/2001	Yakov Kamen	007287.00019	4993		
22907	7590	06/21/2011	EXAMINER			
BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			SMITH, CHENEA			
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/997,336	KAMEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHENEA SMITH	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 May 2011.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3,4,6-9,11,12,14-17,19-27 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3,4,6-9,11,12,14-17,19-27 and 32 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/12/2011 has been entered.

***Response to Amendment***

2. This office action is in response to communications filed 5/12/2011. Claims 1, 3-4, 6-7, 9, 14-15, 21 and 32 are amended. Claims 2, 5, 10, 13, 18, 28 and 31 are cancelled. Claims 1, 3-4, 6-9, 11-12, 14-17, 19-27 and 32 are pending in this action.

***Response to Arguments***

3. Applicant's arguments regarding claims 1, 3-4, 6-9, 11-12, 14-17, 19-27 and 32 have been considered, but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 9, 17, 21-23, 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander et al. (US6177931, hereinafter Alexander) and Proehl et al. (US6577350, hereinafter Proehl).

Regarding claims 1, 9, and 17, Davis discloses a method comprising:  
determining at least two meaningful words in an original program title of an electronic program guide (the text fit system found the words “BEST,” “SHOW,” and “TODAY,” as being meaningful for display, but in reduced 60 and 30 minute grid slots found the words “BEST” and “SHOW” as being more meaningful than the word “TODAY”, see Davis, Fig. 11a and col 18, lines 12-21 and lines 35-43 and col 19\*, lines 38-43);

wherein each of the at least two meaningful words appears at least once in a database storing program titles (see Davis, col 18, lines 44-47),

the at least two meaningful words including a first word and a second word (see Davis, Fig. 11a);

selectively removing a less descriptive word from the program title (see Davis, col 18, lines 12-21 and Fig. 11a);

determining a plurality of essential words of the program title based on a meaning of the program title, wherein the plurality of essential words convey the meaning of the program title (see Davis, col 17, lines 60-67 and Fig. 11a);

determining the number of characters necessary to display the plurality of essential words (see Davis, col 18, lines 1-3); and

removing an essential word if the number of characters necessary to display the plurality of essential words is greater than a specified number of characters, to create an abbreviated program title (see Davis, col 18, lines 1-18 and lines 35-43 and Figs. 11a);

transmitting the abbreviated program title to a client device (see Davis, col 8, lines 42 - 47); and

displaying the abbreviated program title in a program title field of the electronic program guide (Figs. 5a-5c, 7a-7c, and 11a).

Davis does not specifically disclose determining that the first word appears in the database at a greater frequency than the second word,

determining that the first word is a less descriptive word in response to determining the first word appears in the database with a greater frequency than the second word, or

transmitting the original program title to the client device,

wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location.

In an analogous art relating to a system for condensing text by determining words and phrases of greatest significance, Fleischer discloses determining how frequently words and word phrases appear and determining that words and word phrases that appear less frequently have greater significance (Fleischer discloses if the noun phrase "black cat" appears 20 times in a document and the noun phrase "green cat" appears 15 times in the document, the phrase "green cat" is maintained in the summarized text, since it is not as frequently used and is determined to be more suggestive of the document's subject, see Fleischer, col 1, lines 55-59, col 3, lines 18-22, 27-30 and 40-50 and col 4, lines 53-64).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Davis' system to include the limitations as taught by Fleischer for the advantage of providing automatic means for providing a sufficient synopsis of material for a reader (see Fleischer col 1, lines 25-31).

Davis and Fleischer does not specifically disclose transmitting the original program title to the client device,

wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location.

In an analogous art relating to a system for displaying an EPG, Alexander discloses transmitting an original program title to a client device (see Alexander, col 15, lines 47-53).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer to include the limitations as taught

by Alexander for the advantage of providing a more detailed view and description of programming when desired.

Davis in view of Fleischer and Alexander does not specifically disclose wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location.

In an analogous art relating to a system for displaying an EPG, Proehl discloses displaying programming titles in an electronic programming guide such that a user may zoom to display different levels of the EPG, such that the program title areas may be reduced or increased (see Proehl, col 6, line 60- col 7, lines 22). Therefore, by modifying the system of Davis in view of Fleischer and Alexander to include the limitations as taught by Proehl, it would have been obvious to a person having ordinary skill in the art at the time of the invention that when the display of the EPG of Proehl is zoomed out enough, a full title may be shown, and when the display is zoomed in to a certain level, the abbreviated/truncated title may be shown, based on the size of the display area and the amount of space needed to display the title (as taught by Davis). Therefore, the limitation of “wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location” is reasonably taught.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer and Alexander to include the limitations as taught by Proehl for the advantage of providing different formats of display to the user.

Regarding claims 21-23, Davis in view of Fleischer, Alexander and Proehl disclose

parsing text of the program title (see Davis, col 17, lines 48-50, 60-67, col 18, lines 1-3, 13-21 and Figs. 10A and 11a);

determining at least one nonessential, nonrelational word of the program title (see Davis, col 18, lines 12-21, col 19, lines 38-43 and Figs. 10A and 11a); and

removing the nonessential, nonrelational word from the program title (see Davis, Figs. 10A and 11a).

Regarding claim 25, Davis in view of Fleischer, Alexander and Proehl discloses a head end device (see Davis, Fig. 1).

Regarding claim 32, Davis in view of Fleischer, Alexander and Proehl discloses wherein the transmitted abbreviated program title and the original program title are configured to be interchanged in the program title field responsive to a zoom command (Proehl discloses displaying programming titles in an electronic programming guide such that a user may zoom to display different levels of the EPG, such that the program title areas may be reduced or increased (see Proehl, col 6, line 60- col 7, lines 22). Therefore, by modifying the system of Davis in view of Fleischer and Alexander to include the limitations as taught by Proehl, it would have been obvious to a person having ordinary skill in the art at the time of the invention that when the display of the EPG of Proehl is zoomed out enough, a full title may be shown, and when the display is zoomed in to a certain level, the abbreviated/truncated title may be shown, based on the size of the display area and the amount of space needed to display the title (as taught by Davis). Therefore, the limitation of “wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location” is reasonably taught).

7. Claims 3, 4, 8, 11-12, 16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (previously cited) and Proehl (previously cited), as applied to claims 1, 9 and 17 above, and further in view Kudrolli (of record).

Regarding claims 3, 11, and 19, Davis in view of Fleischer, Alexander and Proehl discloses parsing text of the program title (see Davis, col 17, lines 48-50 and lines 60-67, col 18, lines 1-3 and lines 13-21 and Figs. 10A and 11a),

determining at least one nonessential, nonrelational word of the program title (see Davis, col 18, lines 12-21, col 19, lines 38-43 and Figs. 10A and 11a); and

removing the nonessential, nonrelational word from the program title (see Davis, Figs. 10A and 11a), but does not specifically disclose determining at least one relational word of the program title; and

replacing the at least one relational word with a representative character.

In an analogous art relating to a system for abbreviating text, Kudrolli discloses replacing the word “and” with the character “&” in order to cope with display space constraints in computer software (Fig. 20).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer, Alexander and Proehl to include the limitations as taught by Kudrolli for the advantage of further conserving display space, thereby making program guides more useful for a viewer and more pleasant to watch (see Davis, col 2, lines 38-41).

Regarding claims 4, 12, and 20, Davis in view of Fleischer, Alexander and Proehl , and further in view of Kudrolli discloses, in addition to the limitations of claims 3, 11 and 19, abbreviating at least one of the plurality of essential words if the number of characters necessary to display the plurality of essential words is greater than the specified number of characters (see Kudrolli, col 7, lines 48-55).

Regarding claims 8 and 16, Davis in view of Fleischer, Alexander and Proehl, and further in view of Kudrolli discloses wherein an essential word occurring most frequently in the database is removed (see, Kudrolli, col 7, lines 40-47).

8. Claims 6-7 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (previously cited) and Proehl (previously cited), as applied to claims 1, 9 and 17 above, and further in view of Witbrock et al. (US6317708, hereinafter Witbrock).

Regarding claims 6 and 14, Davis in view of Fleischer, Alexander and Proehl does not specifically disclose that the at least one nonessential, nonrelational word comprises all of the words selected from the group consisting of prepositions and articles.

In an analogous art relating to a system for creating summaries of text, Witbrock discloses at least one nonessential, nonrelational word comprises all of the words selected from the group consisting of articles (the article "the" is removed, see Witbrock, col 3, table 1 - col 4, Table 2).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer, Alexander and Proehl to include the limitations as taught by Witbrock for the advantage of efficiently providing abbreviated program descriptions, including program titles, such that the summary text provides accurate representation of the original text, while conserving display space.

Regarding claims 7 and 15 Davis in view of Fleischer, Alexander and Proehl, and further in view of discloses the at least one essential word comprising all of the words selected from the group consisting of subjects, objects, and verbs (the subject, i.e., Security Council, as well as the verb “address”, is kept, see Witbrock, col 3, table 1 - col 4, Table 2).

10. Claims 24, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (previously cited) and Proehl (previously cited), as applied to claims 1, 9 and 17 above, and further in view of Wehmeyer (of record).

Regarding claim 24, Davis in view of Fleischer, Alexander and Proehl discloses that the program listings data are edited through the use of a processor executing a text fit interactive computer program (see Davis, col 17, lines 44-46), that program listings can be listed in an interactive program guide implemented on a cable converter box, the converter box containing processor and memory capabilities (see Davis, col 20, lines 1-4), and that the program schedule information is downloaded and stored in the converter box memory and can be controlled locally (see Davis, col 20, lines 18-21, 24-26), but does not specifically disclose that the text fit system is implemented on a set-top box.

In an analogous art relating to a system for customizing EPG information, Wehmeyer discloses an interface for locally customizing program guide information containing program descriptions (see Abstract) in a cable converter box (see Wehmeyer, col 10, lines 51-62). Generic program guide information, including program identifiers, is received and stored in the cable converter box (see Wehmeyer, col 11, lines 11-22). The user may edit text in a cell of the electronic program guide (EPG) by highlighting a cell, selecting an edit text mode key, and entering the desired text. For example, the user may change the text "THE GOLDEN ERA" to "THE ERA" (col 16, lines 50-64 and Fig. 8).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer, Alexander and Proehl to include the limitations as taught by Wehmeyer for the advantage of provide users with ways to customize the program guide list (see Wehmeyer col 2, lines 13-15).

Regarding claims 26 and 27, Davis in view of Fleischer, Alexander and Proehl, and further in view of Wehmeyer wherein the set-top box receives signals through a satellite network (see Davis, col 5, lines 26-28), and wherein the set-top box is connected to a television, and wherein the television is the display device (see Davis, col 21, lines 4-8 and Fig. 12).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENEA SMITH whose telephone number is (571)272-9524. The examiner can normally be reached on 8:00 am - 4:00 pm, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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